SEAC*communications*

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PRESIDENT'S MESSAGE

Dear Members and Friends of SEAC,

With Pittcon 2015 just around the corner, this is SEAC's peak season, as anyone can tell from even a quick review of the following pages of this newsletter, expertly assembled by Phil and his team of editors. I encourage all SEAC members to participate in the smorgasbord of Society activities in New Orleans next month. I look forward to seeing you all there.

The highlight event, of course, is the Reilley and Murray Awards Symposium in honor of Hubert Girault and Thomas Hamann. Please do attend the Symposium to offer your congratulations and thanks to our award winners. Please also attend the reception at the Jackson Brewery, which is another opportunity to honor Hubert and Thomas (remember to get your reservation to Tim if you plan to attend the dinner following the reception).

Speaking of award winners, hearty congratulations go out to SEAC members George Wilson, Bill Heineman, Joe Wang, Erik Bakker, Joel Harris, Christy Haynes, and Ed Bowden on all their various and extremely well-deserved recognitions (page 11, below). Thank all for your significant contributions to our discipline.

As you hopefully know by now, SEAC has embarked on a fundraising campaign, with Bill Heineman at the helm. The goal of the campaign is to put SEAC squarely on its own feet with a self-sustaining endowment that will assure the continuation of its major activities for the foreseeable future by insulating us from economic and other trends over the horizon. Establishing such an endowment has long been SEAC's goal and substantial progress has been made over the course of SEAC's 31-year history. Once this campaign reaches the $50K target set by the BOD, the endowment should be secure. Thank you to everyone who has contributed to date: the response to my campaign announcement has been most generous but we have some considerable distance yet to go. All contributions to the campaign are tax deductible.

In closing, I thank everyone who has contributed to putting together SEAC's technical and social activities at Pittcon. See you there!

Adrian C. Michael
President, 2013-2015

In this issue--

President's Message
Fundraising Campaign
Pittcon 2015
- Awards Symposium
- Reception, Banquet, and Board Meeting
- Electrochemistry Sessions at Pittcon

Books for Electrochemists
- Fundamentals of Electroanalysis (E. Bakker)
- The Innovators (Walter Isaccson)
- The Intel Trinity (M. S. Malone)
- Turned On! (S. Perone)

Member News
- George S. Wilson
- William R. Heineman
- Joseph Wang
- Eric Bakker
- Christy Haynes
- Ed Bowden

Welcome New Lifetime Members
- Perry Motsegood

Meetings to Come
Job Openings
- Postdoctoral Positions New Mexico State Univ.

How Easy it is to Become a SEAC Member

Dear Members and Friends of SEAC

SEAC was founded to promote electroanalytical chemistry, to enhance interactions between electroanalytical chemists, and to recognize individuals for their outstanding contributions to the field. To further its mission, SEAC administers the Charles N. Reilley Award, the Royce W. Murray Award (formerly the Young Investigator Award), and the Graduate Student Travel Awards. SEAC is extremely grateful for the support of its loyal members and sponsors, which has enabled its successful endeavors over the past 31 years.

One of SEAC's original goals was to establish a self-sustaining endowment. While the Society has made significant progress towards this goal, it is not yet complete. The Board of Directors has voted, therefore, to embark on a campaign to raise $50,000 for the endowment fund. A self-sustaining endowment will secure the Society's continued ability to recognize the outstanding contributions to the field of electroanalytical chemistry of senior investigators, young investigators, and graduate students.

We hope that we can count on your help. Contributions in any amount will be greatly appreciated and we have established the following Donor levels:

Sustaining Donor $2,000+
Platinum Donor $1,000 - $1,999
Gold Donor $500 - $999
Silver Donor $250 - $499
Bronze Donor $100-$249

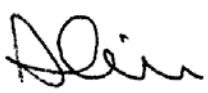
We will post a list of past and current contributors on the Society's web site (should you prefer that your donation remain anonymous, please let us know). Because SEAC is a 501(c)(3) corporation, the full amount of your contribution will be tax deductible and you will receive a receipt from our Treasurer suitable for your tax records.

Donations can be made using PayPal (using the drop-down menu under "Fundraising Campaign Contribution") at http://electroanalytical.org/membership.html **OR** checks in *any* amount (made payable to "Society for Electroanalytical Chemistry") are welcome. Checks should be sent to

Petr Vanysek, Treasurer
Society for Electroanalytical Chemistry
PO Box 173
DeKalb, IL 60115-0173

Thank you.

Sincerely,



Adrian C. Michael
SEAC President (2014-2016)

William R. Heineman
First SEAC President (1984-1985)
Campaign Chairman

PITTCON 2015—MARCH 8–12

Charles N. Reilley and Young Investigator Awards Symposium

The highlight of the SEAC activities at Pittcon will be the presentation of the 2015 C. N. Reilley Award to Hubert Girault of the École Polytechnique Fédérale de Lausanne, Switzerland, and the Royce W. Murray Award to Thomas Hamann, Michigan State University. The symposium in their honor has been arranged by Adrian Michael, University of Pittsburgh, and will be held 1:30 to 4:55 PM on Monday, March 9, 2015, in Room 243 of the Morial Convention Center, New Orleans LA.

1:30 PM Introductory Remarks – Adrian Michael
1:35 PM Presentation of the 2015 Charles N. Reilley Award to Hubert Girault of the École Polytechnique Fédérale de Lausanne by Adrian Michael, University of Pittsburgh
1:40 PM Electrochemical Imaging: Scanning Electrochemical Microscopy and Electrostatic Spray Ionization, Hubert Girault, École Polytechnique Fédérale de Lausanne
2:15 PM Electrochemistry in High Electric Fields Within a Thin-Layer Cell, Henry S. White, University of Utah
2:50 PM Nanorings and Other Things: Electrodeposited Nanostructured Interfaces for Biosensing and Materials Applications, Robert M. Corn, University of California Irvine
3:25 PM Recess
3:40 PM Presentation of the 2015 Royce W. Murray Award to Thomas Hamann, Michigan State University, by Adrian C. Michael, University of Pittsburgh
3:45 PM Making and Breaking Ammonia, Thomas Hamann, Michigan State University
4:20 PM High-Efficiency Generation-Collection Microelectrochemical Platform for Interrogating Electroactive Thin Films, Richard M. Crooks, The University of Texas at Austin

Student Travel Award Winners

Winners of the student travel awards are:

Jeffrey E. Dick, University of Texas at Austin (advisor: A. Bard)
Stephen M. Oja, University of Washington (advisor; Bo Zhang)
Florika Macazo, University of Maryland (advisor: Ryan White)
Rafael Masitas, University of Louisville (advisor: Francis Zamborini)
Kathryn M. Nesbitt, University of Pittsburgh (advisor: Adrian Michael)
Josephine Cunningham, The University of Texas at Austin (Dick Crooks)

Congratulations to all of them!

Other SEAC Activities at Pittcon

The brief Annual Business Meeting will follow the awards symposium for about 10 minutes (room 243 at around 4:55 PM on March 9). Please plan to stay for the meeting, as it is required of all tax-exempt organizations. Prospective members and guests are welcome to attend the business meeting.

The ***SEAC Award Reception*** will be on Monday, March 9, 2015 from ***5:30–7:00 PM at Jackson Brewery Bistro Bar, 620 Decatur Street, New Orleans, LA 70130,*** which is nicely situated across from Jackson Square, on the Mississippi River, and very near Café du Monde. No reservations are needed for the reception and all are welcome. The hot & cold item hors d'oeuvres is free to all members. Cash bar.

The ***SEAC banquet*** will follow at ***7:30 PM at the Jackson Brewery Bistro Bar***. Dinner will cost $60 per person and can be paid in advance on-line by credit card/PayPal or paid to the treasurer at the dinner in either cash or check - no credit cards accepted. There will be a cash bar at both the reception and the dinner. Reservations for the dinner are due to Tim Paschkewitz (tpaschkewitz@pineinst.com) by February 18 at the latest, as announced in an e-mail earlier this year.

The ***board-of-directors meeting*** is scheduled for **Monday, March 9th, Morial Convention Center, Room 341**, **11:30 AM–1:30 PM.** BOD members were asked earlier this year to let Faye Rubinson know if they will be attending the meeting. Former members of the Board are always welcome to attend.

Electrochemistry Sessions at Pittcon (Including Poster Sessions)

SUNDAY AFTERNOON, MARCH 8

- *Session 90* SEAC - Electroanalysis from Benchtop to Bedside, Room 253, 1:30 PM

MONDAY MORNING, MARCH 9

- *Session 280* Analytical Chemistry at the Single Molecule and Single Particle Level, Room 242, 8:30 AM
- *Session 390* Electrochemistry at Nanoscale Structures, Room 264, 8:30 AM
- *Session 420* Electrochemical Approaches to Understanding Brain Function, Room 241, 8:30 AM
- *Session 430* Electrochemistry/Nanotechnology, Room 266, 8:30 AM
- *Poster Session 550* Bioanalytical Samples - Electrochemical, Fluorescence/Luminescence, Sensors and Lab-on-a-Chip Techniques, Exposition Floor, Hall F, Aisles 3900-4500, authors present 10:00 AM–12:00 PM

MONDAY AFTERNOON, MARCH 9

- *Session 580* Charles N. Reilley and Royce W. Murray Awards – **SEAC**, Room 243, 1:30 PM
- *Session 640* Carbon Materials: Electrochemistry and Beyond, Room 262, 1:30 PM
- *Session 670* New Frontiers for Electrochemical Trace Metal Detection of Biological and Environmental Samples on Earth and Beyond, Room 264, 1:30 PM
- *Session 730* Analytical Neurochemistry, Room 240, 1:30 PM
- *Session 760* Electrochemistry - Pharma and Bioanalytical, Room 256, 1:30 PM
- *Poster Session 880* Electrochemistry, Exposition Floor, Hall F, Aisles 3900-4500, authors present 1:00–3:00 PM

TUESDAY MORNING, MARCH 10

- *Session 940* Pittsburgh Analytical Chemistry Award to Andrew G. Ewing, Room 243, 8:30 AM
- *Session 1050* Emerging Methods for Monitoring Neurochemicals in Living Systems, Room 265, 8:30 AM
- *Session 1090* Electrochemistry - Neurochemistry, Room 255, 8:30 AM

TUESDAY AFTERNOON, MARCH 10

- *Session 1360* **SEAC** - A Student Session in Electroanalysis, Room 264, 1:30 PM
- *Session 1410* Electrochemistry - Electrodes, Room 257, 1:30 PM
- *Poster Session 1570* **SEAC** - Society for Electroanalytical Chemistry Poster Session, Exposition Floor, Hall F, Aisles 3900-4500, authors present 1:00 PM–3:00 PM

WEDNESDAY MORNING, MARCH 11

- *Session 1640* Nanoelectrochemistry of Energy Conversion and Storage, Room 260, 8:30 AM
- *Session 1650* SEAC - New Electrodes for Neurochemistry, Room 261, 8:30 AM
- *Session 1680* Ionophore-Based Chemical Sensors I, Room 264, 8:30 AM
- *Session 1740* Electrochemical Techniques for Biomedical Monitoring, Room 257, 8:30 AM

WEDNESDAY AFTERNOON, MARCH 11

- *Session 2020* Microelectrodes, Microfluidics and Microdevices –Tools to Study Physiology On-Chip and In Vivo, Room 263, 1:30 PM
- *Session 2060* Ionophore-Based Chemical Sensors II, Room 264, 1:30 PM
- *Session 2090* Electrochemistry - Bioanalytical and General Interest, Room 255, 1:30 PM

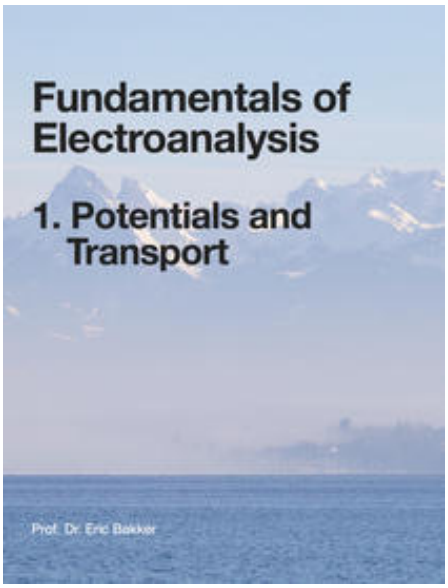
THURSDAY MORNING, MARCH 12

- *Session 2320* Emerging Technologies for Point-of-Care Biomonitoring, Room 264, 8:30 AM
- *Session 2460* Electrochemical Sensors for Bio-Analysis, Room 253, 8:30 PM

THURSDAY AFTERNOON, MARCH 12

- *Session 2710* Electrochemical Microfluidics for Bio-Analysis, Room 241, 1:30 PM

FUNDAMENTALS OF ELECTROANALYSIS. 1. POTENTIALS AND TRANSPORT



Fundamentals of Electroanalysis is a primer for electrochemistry and electroanalysis and useful as a starting point before the digestion of more advanced material. It gives the fundamental framework for three important fields of electroanalysis that have typically been treated in isolation, namely potentiometry at membrane electrodes, dynamic electrochemistry of oxidation-reduction processes, and ion-transfer voltammetry. The first book of this series, Potentials and Transport, focuses on the concept of the cell potential, where the electrochemical potential is introduced as the thermodynamic basis of key importance for most treatments in electrochemistry and electroanalysis. We also introduce essential mass transport principles for the understanding of diffusion, electrical migration and liquid junction potentials. This text includes key tables, including ones for the calculation of activity coefficient of a wide range of electrolytes and liquid junction potentials. Each section of this book is accompanied with a range of problems to solve, and a separate solutions book is available that offers a step by step solution guide. This book is a first of a planned series and is aimed at upper level undergraduate students and at doctoral students as part of a course in electroanalysis. It is an introduction to researchers entering the field of electroanalysis and may also be consulted in self study. It provides an entry point with linked references for further reading and may be useful as a reference of key fundamental concepts. This book will be followed by further volumes on potentiometry, dynamic electrochemistry and ion transfer voltammetry. The electronic format of this text is hoped to make the material more pleasant and transparent than would be possible through the publication of a printed monograph. Cross-references within the text are given as hyperlinks, as are original articles and reviews suggested for further reading.

This book by SEAC member ***Eric Bakker***, University of Geneva, is available for download with iBooks on your Mac or iPad, and with iTunes on your computer. Multi-touch books can be read with iBooks on your Mac or iPad. Books with interactive features may work best on an iPad. iBooks on your Mac requires OS X 10.9 or later.
https://itunes.apple.com/us/book/fundamentals-electroanalysis/id933624613?mt=11

BOOK RECOMMENDATIONS BY PETE KISSINGER

Three Books for SEAC Fans: Walter Isaccson, “The Innovators” (2014); Michael S. Malone, “The Intel Trinity” (2014); Sam P. Perone, “Turned On!” (2014)

Since Thanksgiving I’ve enjoyed these three books and suspect many SEAC members would do the same given our shared passion for chemical instrumentation. The Isaccson book carries the notion of computing machines from the 19th century to the present and does so in a fast paced manner. Covering many of the personalities in the transition from purely mechanical devices, to electromechanical enhancements, on to vacuum tubes, then integrated circuits and finally to the ubiquitous microprocessors of today. The story reinforces that science and engineering are human activities with the admix of all that entails including genius, jealousy, egos, scandals, thieves, law suits, military conflict and fierce competition. In the end, solid state electrochemical devices win the day, along with the batteries and photocells in satellites. It all took a bit over a century; slow to some, but a decent accomplishment for a species some 400 or more millennia old. One disappointment with the Isaccson book is the failure to mention analog computers of the sort pioneered by George Philbrick.

Many electrochemists used these as the basis for very convenient potentiostats, right out of the box, mounted on steel 'racks' of gray or black.

The Malone effort is a lot more focused, elaborating on the often told story of one amazing entrepreneurial success centered on three principals: Robert Noyce, Gordon More and Andy Grove, but including a much larger number of supporting cast that truly made it happen. The thrust of the book is on the contrasting personalities with overlapping, but also orthogonal skills. One of these was a charismatic leader of both people and vision; one a leader of science; and the third a manager who could make tough HR decisions and stay on task. All three were consummate engineers, taking the best science to the people who needed it. As I like to say, "science is the operating system and engineering is the app." Intel made it happen for billions of people, but nowhere near a mole of our species yet.

The third book paints on a much smaller canvas, both in time (ca. 1960-1980) and place (Purdue University). It is an informal memoire of an analytical electrochemist, PhD awarded at Wisconsin with Prof. Irving Shain, as he struggles to build a career through the academic ranks at a top analytical chemistry program. The connection to the two volumes mentioned above is the transition of analytical instrumentation in the 1960s, first to solid-state and then to digital. The new tools caught the imagination and excitement of many while dismaying many others who saw instruments dominating chemistry as if an infectious disease was spreading via journals and could not be stopped. Electrochemistry fit perfectly as a hand to a glove, a perfect combination of current, potential and time where the outer limits of all three could be easily pushed. Names like Jack Harrar, Glenn Booman, Donald D. DeFord, Robert Osteryoung, Fred Anson, Don Smith, and Chris Enke were among the many infected. Sam Perone caught the fever and, even better, quickly became a Typhoid Mary by spreading the infection with a computer interfacing summer course at Purdue. He was joined in the enterprise with the likes of Harry Pardue and the team of Jon Amy, a college roommate of David Packard. My advisor, Charlie Reilley (think Reilley Award) became infected. Gary Hiefje and Stan Crouch were infected. Of course Howard Malmstadt of the University of Illinois was an early proponent of electronics in chemistry (think "Electronics for Scientists" with Malmstadt, Enke and Crouch and the Heath Company in Michigan). I fear that most under 60 years of age will have little notion of any of this. Those 75 and above will think fondly of the good old days.

The 60's were a decade of political turmoil and success, war and assassinations, race riots and environmental concerns, heading for the moon and cyclic voltammetry. In other words, it was pretty much like today with highly polarized shouting matches. It was a perfect time for me to be an undergrad and then a graduate student, watching with amazement, but having no responsibility whatsoever.

Sam was just enough years ahead to be a full participant and this is his story as a novice faculty member raising a young family. The year 1969 occasioned the most famous cyclic voltammogram of all time to be sketched out in San Francisco at a gathering of the Western Electroanalytical Theoretical Society (WETS), the predecessor of SEAC. Let's just say two things before quitting: (1) undenatured lab ethanol played an important role in the 1960s and (2) it was very fortunate that smart phones with cameras or smart cameras with phones were still 3 decades in the future. All three volumes are readily available in a few tens of seconds via Amazon and thanks to Intel and credit cards for that.

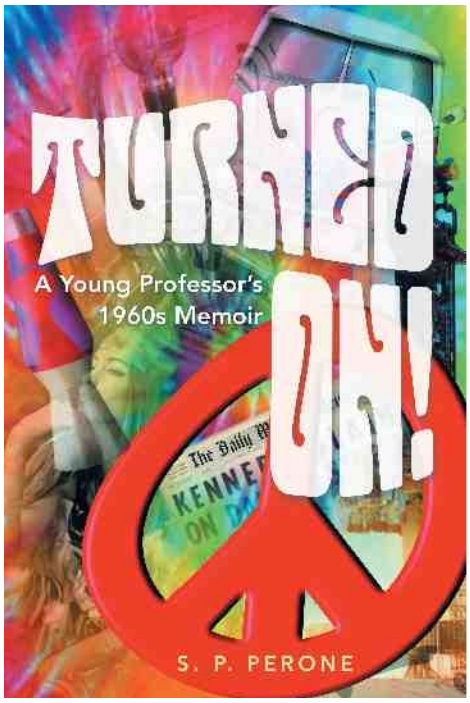
Peter T. Kissinger

TURNED ON

***Turned On! A Young Professor's 1960s Memoir*, 2014, iUniverse, 384 pages.** After publishing seven novels this past decade, SEAC member and author Sam Perone has now produced a memoir chronicling the launch of his career as an academic scientist during the turbulent 1960s. A self-diagnosed "misfit" for a prestigious university position in 1962—and younger than many of his grad students—this naïve young man soon became entangled in a series of misadventures on an erratic

journey toward the Holy Grail of all young professors—*promotion and tenure*.

Whether it's about faculty politics for which he was ill-prepared; wild student parties that provided a welcome escape; or about being *turned on* by the 1960s' minicomputer revolution that propelled him to unanticipated notoriety, *Turned On!* is filled with humor, angst and suspense, interwoven with signature historical events that defined the times. Delivered in the same fast-paced, dialogue-driven style of his novels—and filled with dozens of vintage photos—the author provides an entertaining and nostalgic romp through a memorable era.



Print versions of the new book are available from the publisher and a number of online booksellers. **E-book versions** are available from the publisher and other online outlets. Signed copies can be ordered from the author. For more information, please see the author's website.

Author Background: Sam Perone, was professor of analytical chemistry at Purdue University during the 1960s and 70s, where he served for a time as head of the analytical division. He pursued research in electrochemistry, photoelectrochemistry, computer-optimized voltammetry and multivariate analysis. He was a pioneer in the evolution of computer-controlled instrumentation and the education of scientists in this emerging area during the 1960s. Subsequent to leaving Purdue, Perone became head of analytical sciences at Lawrence Livermore Lab and then accepted a position as professor of analytical chemistry and associate dean of science at San Jose State University. He took early retirement in 1999 to focus on consulting and writing. He has subsequently published seven (several award-winning) novels in the mystery/thriller genre. Most recently, he has published a memoir of his unique combination of academic and non-academic careers, focusing primarily on his adventures, research and colorful associates while a very young professor at Purdue University in the 1960s. For information on his books, visit his web site: www.samperone.com.

NEWS FROM MEMBERS

The American Chemical Society is recognizing fellow electrochemists. The 2015 Award in Electrochemistry goes to ***George S. Wilson***, University of Kansas, and the 2015 Award for Distinguished Service In the Advancement of Analytical Chemistry goes to **William R. Heineman**, University of Cincinnati.

George S. Wilson is Distinguished Professor Emeritus, Department of Chemistry, University of Kansas. Wilson received a A.B. in Chemistry in 1961 from Princeton University and Ph.D. in 1965 from University of Illinois. He was a Postdoctoral Fellow, between 1965–1967 in University of Illinois. Wilson's research interest include, the development of new analytical protocol for accurate sample measurement, biosensors and biological recognition, and post-translational modifications of proteins.

William R. Heineman is a Distinguished Research Professor and Head of the Department of Chemistry, University of Cincinnati. He obtained his BS in Chemistry from Texas Tech University in 1964 and PhD in Chemistry in 1968 from the University of North Carolina at Chapel Hill. Heineman joined the faculty at the University of Cincinnati in 1972. Heineman's research interests include spectroelectrochemistry, chemical sensors, analytical chemistry of radiopharmaceuticals, polymer modified electrodes, electrochemical immunoassay, and microfluidic systems for chemical analysis. Heineman has published over 400 research papers and patents and has presented over 500 lectures at conferences, universities, and government/industrial laboratories. He was elected a Fellow of the American Association for the Advancement of Science in 2001 and chosen for the inaugural class of Fellows of the American Chemical Society in 2009. Heineman has also served on numerous advisory boards for scientific journals including Analytical Chemistry, Biosensors and Bioelectronics, Analytica Chimica Acta, and Electroanalysis. He was a co-founder and the first President of the Society for Electroanalytical Chemistry and was a member of the Board of Directors.

Joseph Wang has been named to the Science Applications International Corporation (SAIC) Endowed Chair in Engineering at the Univ. of California, San Diego's Jacobs School of Engineering. Joe currently serves as Chair of the Department of NanoEngineering and Director of the Center for Wearable Sensors at the UC San Diego Jacobs School of Engineering. Check it out at***: http://www.jacobsschool.ucsd.edu/news/news_releases/release.sfe?id=1672***

Eric Bakker*,* University of Geneva, has been awarded the RSC Robert Boyle Prize for Analytical Science for his pioneering work on redefining and re shaping the field of ionophore based sensors and the development of chemical based sensors and optical sensing strategies for both environmental and bioanalytical application.

Christy Haynes has been named the Elmore Northey Professor of Chemistry at the University of Minnesota and was featured on "The Analytical Scientist's Top 40 Under 40 Power List.

SEAC member, ***Joel Harris*** (University of Utah), was recently elected the next Chair-Elect of the ACS Division of Analytical Chemistry. Next year, he will be Program Chair for the ANYL Division and responsible for organizing symposia at the 2016 National ACS meetings in San Diego (March 13 - 17) and Philadelphia (August 21 - 25). If you are interested in organizing a symposium for either of these meetings, send Joel a note (harrisj@chem.utah.edu). Symposia of broad interest can be co-sponsored by more than one division.

Leslie Sombers sends us a picture taken at a session at SERMACS (http://www.sermacs.org/) called '30 years of Electrochemistry'. It was honoring ***Ed Bowden***'s career (North Carolina State University).

Back row from left to right: Stuart Burris, Fred Hawkridge, James Willit, Frank Zamborini, Steve Creager, Jim Burgess, Dave Cliffel, Jean Marie Wallace, Ed D'Antonio. Front row from left to right: Michael Leopold, Rose Clark, Ed Bowden, Leslie Sombers, Maryanne Collinson.

SPECIAL THANKS TO OUR SOON-TO-BE AND A NEW LIFETIME MEMBER!

Special thanks go to Anando Devadoss, Luke Haverhals, Michael Johnson, Tim Paschkewitz, Scott K Shaw, Karl Sienerth, Michael Zach, and Bo Zhang, who all have contributed with installments towards lifetime membership.

We welcome Perry Motsegood, former PhD student of Johna Leddy, University of Iowa, and currently postdoc researcher at Argonne National Laboratory, as new lifetime members. Thank you!

MEETINGS TO COME

Meetings of interest to our SEAC members abound during the coming year, with symposia being organized by some among us.

Meeting	***When***	***Where***	***Link for More Information***
3rd Zing Electrochemistry Conference	2015, Feb. 25–28	Nerja, Malaga, Spain	http://www.zingconferences.com
Pittcon 2015	2015, March 8–14	New Orleans, LA, USA	http://www.pittcon.org/
249th ACS National Mtg	2015, March 22–26	Denver, CO	content/acs/en/meetings
16th ISE Topical Meeting	2015, March 22–25	Angra do Reis, Brazil	http://www.ise-online.org/annmeet/next_meetings.php
4th Zing Electrochemistry Conference	2015, April 19–22	Tivoli Carvoeiro, Portugal	4th Zing Electrochemistry Conference
227th ECS Spring meeting	2015, May 24–28	Chicago, IL	http://www.electrochem.org/meetings/biannual/fut_mtgs.htm
17th ISE Topical Meeting	2015, May 31–June 3	Saint-Malo, France	http://www.ise-online.org/annmeet/next_meetings.php
2nd Summer School in Molecular Electrochemistry	2015, June 29–July 2	Amealco de Bonfil, Queretaro, Mexico	https://sites.google.com/site/microechem2015/home
250th ACS National Mtg	2015, August 16–20	Boston, MA	content/acs/en/meetings
11th BBMEC (Biosensor and Bioanalytical Microsystems for Environmental, Food and Clinical Analysis)	2015, September 26–30	Regensburg, Germany	www.bbmec.org/11 (Chair: Antje Baeumner); see also notes following this table
66th ISE Annual Meeting	2015, October 4–9	Taipei, Taiwan	http://www.ise-online.org/annmeet/next_meetings.php
228th ECS Fall meeting	2015, Oct. 11–16	Phoenix, AZ	http://www.electrochem.org/meetings/biannual/fut_mtgs.htm
10th International Frumkin Symposium on Electrochemistry	2015, Oct. 21–23	Moscow, Russia	Alexander A. Nekrasov: alexander.nek@gmail.com
Pacifichem 2015	2015, Dec. 15–20	Honolulu, HI	http://www.pacifichem.org
18th ISE Topical Meeting	2016, March 9–11	Gwangju, South Korea	http://www.ise-online.org/annmeet/next_meetings.php
Pittcon 2016	2016, March 6–11	Atlanta, GA	http://pittcon.org
251st ACS National Mtg	2016, March 13–17	San Diego, CA	content/acs/en/meetings
International Society of	2016, April	Auckland, New	(see note after this table)

Meeting	*When*	*Where*	*Link for More Information*
Electrochemistry, Topical Meeting: Electrochemistry at Modified Interfaces		Zealand	
229th ECS Spring meeting	2016, May 20–June 3	San Diego, CA	http://www.electrochem.org/meetings/biannual/fut_mtgs.htm
252nd ACS National Mtg	2016, August 21–25	Philadelphia, PA	content/acs/en/meetings
67th ISE Annual Meeting	2016, Aug. 21–26	The Hague, Netherlands	http://www.ise-online.org/annmeet/next_meetings.php
PRiME 2016 (ECS)	2016, May 24–28	Chicago, IL	http://www.electrochem.org/meetings/biannual/fut_mtgs.htm
Pittcon 2017	2017, October 9–14	Honolulu, HI	http://pittcon.org
253rd ACS National Mtg	2017, April 2–6	San Francisco, CA	content/acs/en/meetings
68th ISE Annual Meeting	2017, August 27–Sept. 1	Providence, RI	http://www.ise-online.org/annmeet/next_meetings.php
232nd ECS Fall meeting	2017, October 1–6	National Harbor, MD	http://www.electrochem.org/meetings/biannual/fut_mtgs.htm

International Society of Electrochemistry, Topical Meeting: Electrochemistry at Modified Interfaces
April 2016, Auckland, New Zealand
Co-chairs: Professors David Williams (University of Auckland) and Alison Downard (University of Canterbury)
Topics will include (but are not limited to): theory and fundamental studies of electron transfer, electrocatalysis, smart materials, electron transfer to biological species, electroanalysis, corrosion and surface treatments for industrial applications.

Workshop on biosensors and bioanalytical microtechniques in environmental, food and clinical analysis (BBMEC)

The prestigious conference on biosensors, "Workshop on biosensors and bioanalytical microtechniques in environmental, food and clinical analysis (BBMEC)" co-hosted with the International Association of Environmental Analytical Chemistry (IAEAC) will be held for the 11th time gathering researchers from all over the world to present and discuss newest developments in the broad field of biosensors. Focus of the conference will be on unpublished data, discussion, networking. A graduate student/postdoc pre-conference is organized to kick-off presentations and discussions among young researchers. Students can apply for financial support. www.bbmec.org/11

Conference topics: Novel Concepts in Biorecognition, Transduction, Signal amplification and Sample preparation; Lab-on-a-chip, microTAS, biosensors; Nanomaterials; Microtechniques; Surfaces/interfaces; Screening; Array technology; Imaging; On-site analysis; Label-free, **electrochemical**, optical, mass-based, magneto transducers; Application to clinical, food, environmental and processing challenges

Confirmed invited speakers: Yoshinobu Baba (Nagoya, Japan); Shimshon Belkin (HUJI, Jerusalem, Israel); Dieter Braun (LMU, Munich, Germany); Petra Dittrich (ETH, Switzerland); Andrew Ellington (University of Texas, Austin, USA); Jenny Emneus (DTU, Copenhagen, Denmark); Margaret Frey (Cornell, USA);
Man Bock Gu (Seoul, Korea); Karsten Haupt (Compiegne University, France); Jiri Homola (Charles University, Czech Republic); Laura Lechuga (ICN2, Barcelona, Spain); Sam R. Nugen (Amherst, MA, USA); Ute Resch-Genger (BAM, Berlin, Germany); Joseph Wang (UC San Diego, California, USA)

JOB OPENINGS

Postdoctoral Research Position @ New Mexico State University, Las Cruces, New Mexico

A postdoctoral position supported by NSF in the general area of electrocatalysis at nanoparticle ensembles of ultramicrodimensions and at single nanoparticles is available immediately in the Department of Chemistry and Biochemistry at New Mexico State University. Candidates must have a Ph.D. in Chemistry with a strong background in electrochemistry/electroanalytical chemistry. Expertise in the use of scanning electrochemical microscopy (SECM), ultramicroelectrodes, nanoparticle collision experiments, electrocatalysis, and Comsol Multiphysics simulations is desired. The project is both fundamental and applied in scope. A CV and names of three references should be sent by email to:

Professor Cynthia Zoski (czoski@nmsu.edu)
P.O. Box 30001, MSC 3C, Chemistry and Biochemistry,
New Mexico State University, Las Cruces, NM 88003-8001.

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